

Math 112  
LQuiz 02

2022-01-13 (R)

Your name: \_\_\_\_\_

## Exercise

Use properties of exponents and logarithms to compute the following. (The answers are integers.)

(a) Let

$$e^a = \frac{2}{3}$$

$$e^b = 3$$

$$e^c = \frac{5}{6}$$

Compute

$$e^{2a+3b-13c} \cdot \frac{e^{10a+7c}}{e^{10a-7c}}$$

(b) Let

$$\ln a = 2$$

$$\ln b = -10$$

$$\ln c = \pi$$

Compute

$$\ln \left( \frac{a^5}{b^{-3}c^{12}} \right) - \ln \left( \frac{b^4}{(c^6)^2} \right)$$